

DUWAMISH RIVER BASIN

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12113347 MILL CREEK AT EARTHWORKS PARK, AT KENT, WA

LOCATION.--Lat 47°23'00", long 122°13'25", in SW 1/4 NW 1/4 sec.19, T.22 N., R.5 E., King County, Hydrologic Unit 17110013, at control-manhole of flood-detention basin in Earthworks Park, 250 ft upstream from Titus St., and 0.6 mi east of Kent City Hall.

DRAINAGE AREA.--2.49 mi².

PERIOD OF RECORD.--January 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is sea level (City of Kent benchmark).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow affected by urbanization and construction of flood-control catchments. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--6 years (water year 1995-2000), 4.68 ft³/s, 25.52 in./yr, 3,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined Feb. 9, 1996, elevation, 47.52 ft, affected by backwater from debris caught on downstream culvert grates; maximum elevation, 48.05 ft May 13, 1996, affected by backwater from debris caught on downstream culvert grates; minimum discharge, 0.31 ft³/s July 5, 1995, Aug. 12, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 88 ft³/s Feb. 1, elevation, 45.68 ft; minimum daily discharge, 0.65 ft³/s Sept. 6, 7, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	1.4	9.3	9.3	36	7.6	1.8	1.7	1.1	.80	.66	e.70
2	.75	1.0	9.8	4.8	19	9.9	1.7	2.8	1.1	.86	.68	e.75
3	.74	1.1	6.1	8.4	14	8.9	1.7	4.1	1.1	3.5	e.70	e.80
4	.75	.97	4.9	10	9.9	16	1.7	2.6	1.1	1.1	e.70	e.80
5	.76	1.6	6.3	5.0	7.7	11	1.6	2.5	1.1	.92	e.70	e.70
6	.74	7.5	9.6	4.5	6.7	8.5	2.3	1.7	1.2	.82	e.75	e.65
7	.89	2.1	6.2	4.6	7.9	6.8	1.9	1.5	1.2	.80	e.75	e.65
8	5.6	2.2	6.0	6.9	15	5.4	1.7	1.9	1.8	.80	e.75	e.85
9	1.1	5.9	7.0	8.4	10	4.9	1.6	5.6	1.7	.79	e.75	e.65
10	.82	9.6	4.8	7.6	8.3	3.9	1.5	5.2	1.6	.79	e.75	e3.8
11	1.1	9.0	e4.2	7.4	6.7	3.9	1.5	4.1	3.3	.80	e.75	e.90
12	1.1	43	e20	7.2	5.6	3.4	1.5	2.4	11	.79	e.75	e.80
13	.83	31	e9.6	6.0	4.6	6.3	3.3	1.8	3.2	.79	e.75	e.80
14	.79	28	e13	8.3	9.1	7.5	3.8	1.5	1.8	.79	e.75	e.80
15	.76	16	e30	6.6	7.2	3.8	4.2	1.3	1.4	.79	e.75	e.80
16	.76	19	e27	8.0	5.3	7.1	2.2	1.3	1.2	.80	e.75	e.80
17	.76	20	e23	5.3	4.4	3.5	1.9	1.2	1.1	.79	e.75	e.80
18	.76	9.2	e16	4.5	4.0	5.2	1.7	2.4	1.3	.74	e1.6	e.80
19	.76	9.6	e13	4.0	3.7	3.5	1.5	3.0	1.0	.72	e.85	e.80
20	.75	16	e10	6.5	3.5	2.9	1.4	1.6	.93	.71	e.75	e.80
21	.75	19	8.9	6.3	6.2	2.7	1.4	2.0	.90	.69	e.75	e.80
22	.76	14	7.3	4.5	9.6	7.5	1.6	1.7	.88	.70	e.75	e.80
23	.78	5.8	5.8	3.8	7.6	4.4	1.6	1.3	.89	.69	e.75	e.80
24	.77	6.3	4.8	3.5	5.6	3.2	1.4	1.2	.87	.68	e.75	e.80
25	1.2	32	4.1	4.0	7.8	2.6	2.2	1.1	.84	.68	e.75	e.80
26	.85	27	3.8	3.2	8.3	2.4	1.5	1.3	.82	.68	e.80	e.80
27	2.6	24	3.7	3.0	11	2.6	1.8	1.6	.82	.67	e.75	e.80
28	2.8	15	3.4	2.8	6.3	2.3	2.0	1.6	.83	.67	e.75	e.80
29	1.1	9.2	3.5	2.8	12	2.3	1.6	1.2	.81	.70	e.75	e.87
30	1.5	10	3.5	2.8	---	2.0	1.4	1.1	.81	.70	e.80	e1.5
31	4.4	---	6.6	4.6	---	1.8	---	1.2	---	.67	e.70	---
TOTAL	38.78	396.47	291.2	174.6	263.0	163.8	57.0	65.5	47.70	26.43	23.94	27.22
MEAN	1.25	13.2	9.39	5.63	9.07	5.28	1.90	2.11	1.59	.85	.77	.91
MAX	5.6	43	30	10	36	16	4.2	5.6	11	3.5	1.6	3.8
MIN	.74	.97	3.4	2.8	3.5	1.8	1.4	1.1	.81	.67	.66	.65
AC-FT	77	786	578	346	522	325	113	130	95	52	.47	.54
CFSM	.50	5.31	3.77	2.26	3.64	2.12	.76	.85	.64	.34	.31	.36
IN.	.58	5.92	4.35	2.61	3.93	2.45	.85	.98	.71	.39	.36	.41

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2000, BY WATER YEAR (WY)

MEAN	2.38	8.49	9.94	9.47	8.66	5.65	3.23	2.05	1.72	1.12	1.07	1.18
MAX	4.44	13.2	12.6	15.1	20.0	8.34	8.03	3.09	3.45	1.66	1.40	1.88
(WY)	1998	2000	1996	1997	1996	1999	1996	1996	1997	1997	1999	1997
MIN	1.25	2.88	5.10	4.46	3.20	4.09	1.69	1.08	1.08	.85	.59	.80
(WY)	2000	1995	1998	1995	1997	1996	1998	1995	1995	2000	1994	1999

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR	FOR 2000 WATER YEAR	WATER YEARS 1994 - 2000
ANNUAL TOTAL	1963.20	1575.64	
ANNUAL MEAN	5.38	4.31	4.68
HIGHEST ANNUAL MEAN			6.32
LOWEST ANNUAL MEAN			3.22
HIGHEST DAILY MEAN	43	Nov 12	97
LOWEST DAILY MEAN	.72	Jul 8	.44
ANNUAL SEVEN-DAY MINIMUM	.75	Sep 26	.47
ANNUAL RUNOFF (AC-FT)	3890	3130	3390
ANNUAL RUNOFF (CFSM)	2.16	1.73	1.88
ANNUAL RUNOFF (INCHES)	29.33	23.54	25.52
10 PERCENT EXCEEDS	14	9.7	10
50 PERCENT EXCEEDS	2.2	1.7	2.1
90 PERCENT EXCEEDS	.79	.75	.75

e Estimated